

the entire land area was used. This procedure has been recently confirmed by personnel from the FCC FM engineering department. Since the entire N 135°E radial falls entirely over water beyond 3 kilometers, it was not used in computing the antenna height above average terrain in accordance with Section 73.313.

Contour Data

The distances along these radials to the limits of the 3.16 mV/m (70 dBu) and the 1 mV/m (60 dBu) contours were determined from reference to Figure 1, Section 73.333 of the Rules, and are shown on the attached Table II. The 3.16 mV/m and the 1 mV/m contours are shown on an attached map (Exhibit E-3).

Principal Community Coverage

Although the 3.16 mV/m contour does not entirely encompass the principal community, it provides approximately 94% of the area of Ocean City, and therefore, is in accordance with the requirements of Section 73.315 of the FCC Rules. The Commission noted in MM Docket No. 87-222 that, "The FM Branch does not require waiver of this requirement unless the proposed 3.16 mV/m coverage falls below 80% of the area of the principal community."^{1/}

^{1/} Letter to Southwest Communications, Inc. from Dennis Williams, Acting Branch Chief, dated July 16, 1986.

Population and Area Data

The 1 mV/m (60 dBu) contour was transferred to a U.S. Census minor civil division maps of Maryland and Delaware, and the population was counted using the 1980 Census data. Where a contour included only a portion of a minor civil division, uniform distribution of the population exclusive of cities and towns was assumed. The proportionate population served by the contour and cities and towns within the contour was included in the total. The land area of the contour was measured with a polar planimeter using the original map.

FAA Data

The FAA has been notified of the proposed construction of a tower by filing an FAA 7460-1 Form.

Main Studio Location

The main studio will be located within the 70 dBu contour in accordance with Section 73.1125 of the Rules.

Other Radio Stations

There are no FM or TV broadcast stations located within 200 meters of the proposed site.

There is one FM station and two construction permits for new operations located within 10 kilometers of the proposed site. These stations are WKHI, Channel 260B and construction permits on Channels 246A and 250A. WKHI and the proposed

operation has a potential of producing intermodulation products on Channel 225 (92.9 MHz). Similarly, Channel 250 and the proposed operation have a potential of producing intermodulation products on Channel 205 (88.9 MHz). However, there are no FM stations in the vicinity of the proposed operation which may be affected.

There are no TV stations within 10 kilometers of the proposed site.

There are no AM stations located within 3.22 kilometers of the proposed site.

Blanketing Contour

The proposed blanketing contour (115 dBu) based on an ERP of 3.0 kW will extend approximately 0.68 kilometers (0.42 mile) from the site. The applicant will comply with all the pertinent requirements of Section 73.318 of the FCC Rules and Regulations.

Environmental Statement

The 6 kW operation (3 kW H plus 3 kW V) will utilize a 3-bay FM antenna with a center of radiation above ground of 99.8 meters. The antenna proposed according to the manufacturer meets the "best-case" downward radiation specified in OST Bulletin No. 65. Based on "best-case" downward radiation, the proposed operation complies with the FCC Rules,

Section 1.1307 as it meets the provisions of the ANSI RF radiation guideline. FM transmitter power will be reduced or terminated when workers are at or above the 90 meter level of the 104.5 meter guyed tower.

An environmental assessment (EA) is categorically excluded under Section 1.1307 of the FCC Rules and Regulations since the applicant indicates:

- (a)(1) The proposed facilities are not located in an officially designated wilderness area.
- (a)(2) The proposed facilities are not located in an officially designated wildlife preserve.
- (a)(3)(i) The proposed facilities will not affect any listed threatened or endangered species or habitats.
- (a)(4) The proposed facilities will not affect any known districts, sites, buildings, structures, or objects significant in American history, architecture, archaeology, engineering or culture.
- (a)(5) The proposed facilities are not located near any known Indian religious sites.
- (a)(6) The proposed facilities are not located in a flood plain.
- (a)(7) The side-mounted FM antenna on proposed guyed tower will not involve a significant change in surface features of the ground in the vicinity of the tower.
- (b) A security fence with a locked gate will surround the tower. Workers and the general public will not be subjected to RF radiation levels in excess of ANSI

standard, C95.1-1982. Authorized personnel will be alerted to areas of the tower where potential radiation levels are in excess of the ANSI standard.

Auxiliary Power

The applicant proposes to install auxiliary power at the studio and transmitter site of proposed FM station.

COHEN, DIPPELL AND EVERIST, P. C.
 TABLE I
 FM ALLOCATION SITUATION
 FOR THE PROPOSED CHANNEL 295A OPERATION AT
OCEAN CITY, MARYLAND
DECEMBER 1990

Channel	Call	City/State	Geographic Coordinates	Separation	
				Actual	Required
295A	Proposed	Ocean City, MD	N 38°20'04" W 75°07'16"	--	--
292A	WCEM-FM	Cambridge, MD	N 38°35'02" W 76°04'56"	88.3	31
293A	New-App BPH-880714NW	Pocomoke City, MD	N 37°58'38" W 75°32'36"	54.2	31
293B	WWMX	Baltimore, MD	N 39°20'10" W 76°38'59"	173.2	69
294A	Vacant	North Cape May, NJ	N 38°58'11" W 74°57'20"	72.0	72
294A	New-App* BPH-880727MC	North Cape May, NJ	N 38°57'32" W 74°55'23"	71.4	72** (64)
294B	WJFK	Manassas, VA	N 38°52'28" W 77°13'24"	192.7	113
295B	WKDN	Camden, NJ	N 39°54'33" W 75°06'00"	174.8	178
295C	WAFX	Suffolk, VA	N 36°48'16" W 76°45'17"	222.9	226** (222)
296A	WDLE-FM	Federalsburg, MD	N 38°46'02" W 75°44'46"	72.6	72
297B1	New APPGID	Atlantic City, NJ	N 39°23'57" W 74°22'19"	134.9	48
297B	WRQX	Washington, DC	N 38°57'01" W 77°04'47"	183.7	69
298B	WKRE-FM	Exmore, VA	N 37°31'46" W 75°54'44"	113.2	69

*Closest Application

**Grandfathered under MM Docket No. 88-375

See Exhibit E "Allocation Situation"

() 3 kW Separation Distances

COHEN, DIPPELL AND EVERIST, P. C.

TABLE II
COMPUTED COVERAGE DATA
FOR THE PROPOSED FM OPERATION AT
OCEAN CITY, MARYLAND
DECEMBER 1990

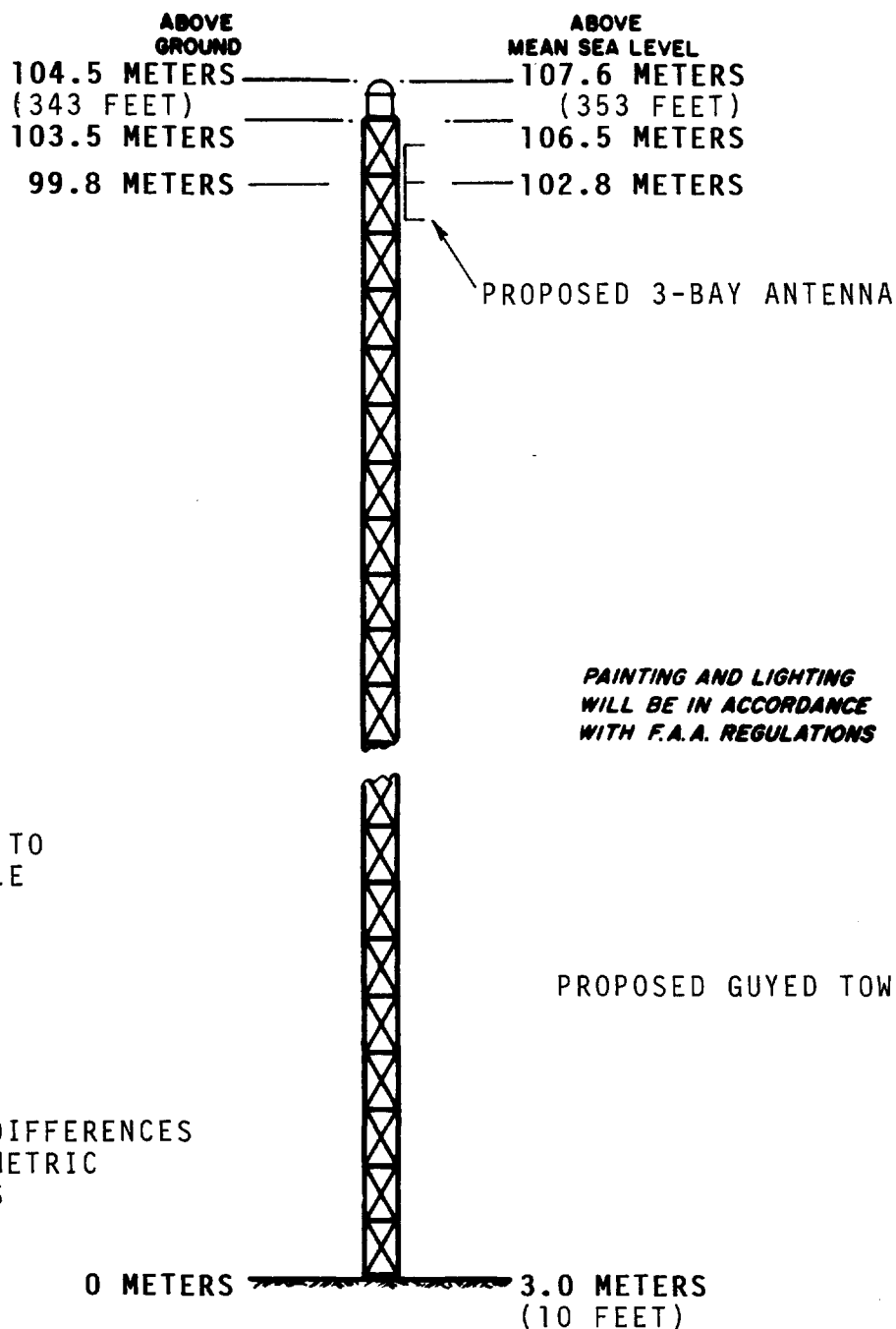
Radial Bearing N °E,T	Average* Elevation 3 to 16 km feet	Height of Radiation Center Above Average Elevation of Radial 3 to 16 km meters	Predicted Distance to Contour	
			3.16 mV/m km	1 mV/m km
0	1.2	101.6	13.8	24.6
45	0.4	102.4	13.8	24.7
90	1.8	101.0	13.7	24.5
135	0.0**	102.8	13.9	24.7
180	0.5	102.3	13.8	24.7
225	2.4	100.4	13.7	24.5
270	7.4	95.4	13.4	23.9
315	6.2	96.6	13.5	24.0

*Based on NGDC 3-second data base,
see Exhibit E - "Topographic Data"

**Radial not included in average elevation or HAAT
as it extends over water

Channel 295A (106.9 mHz)
Effective Radiated Power 3 kW (4.77 dBk)
Average Elevation 3 to 16 km 2.8 Meters AMSL
Center of Radiation 102.8 Meters AMSL
Antenna Height Above Average Terrain 100 Meters

North Latitude: 38° 20' 04"
West Longitude: 75° 07' 16"



NOTE-0.1 METER DIFFERENCES
RESULT IN METRIC
CONVERSIONS

VERTICAL SKETCH
PROPOSED FM OPERATION AT
OCEAN CITY, MARYLAND
DECEMBER 1990

75° 07' 30" 38° 22' 30" 490000m E. 491 492 5' 493 MARYLA

EXHIBIT E-2

OCEAN CITY, MD.

N3815—W7500/7.5

1964

PHOTOREVISED 1972
AMS 5960 I SE—SERIES V835

CONTOUR INTERVAL 5 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

SITE COORDINATES

N. 38° 20' 04"

W. 75° 07' 16"

75° 07' 30"

75° 05' 00"

38° 20' 00"

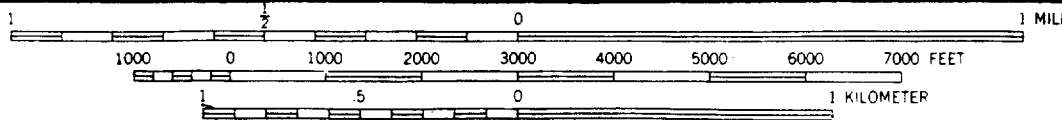
PROPOSED SITE

TRANSMITTER SITE
FOR THE PROPOSED FM OPERATION AT
OCEAN CITY, MARYLAND
DECEMBER 1990

COHEN, DIPPELL and EVERIST, P.C.

Consulting Engineers

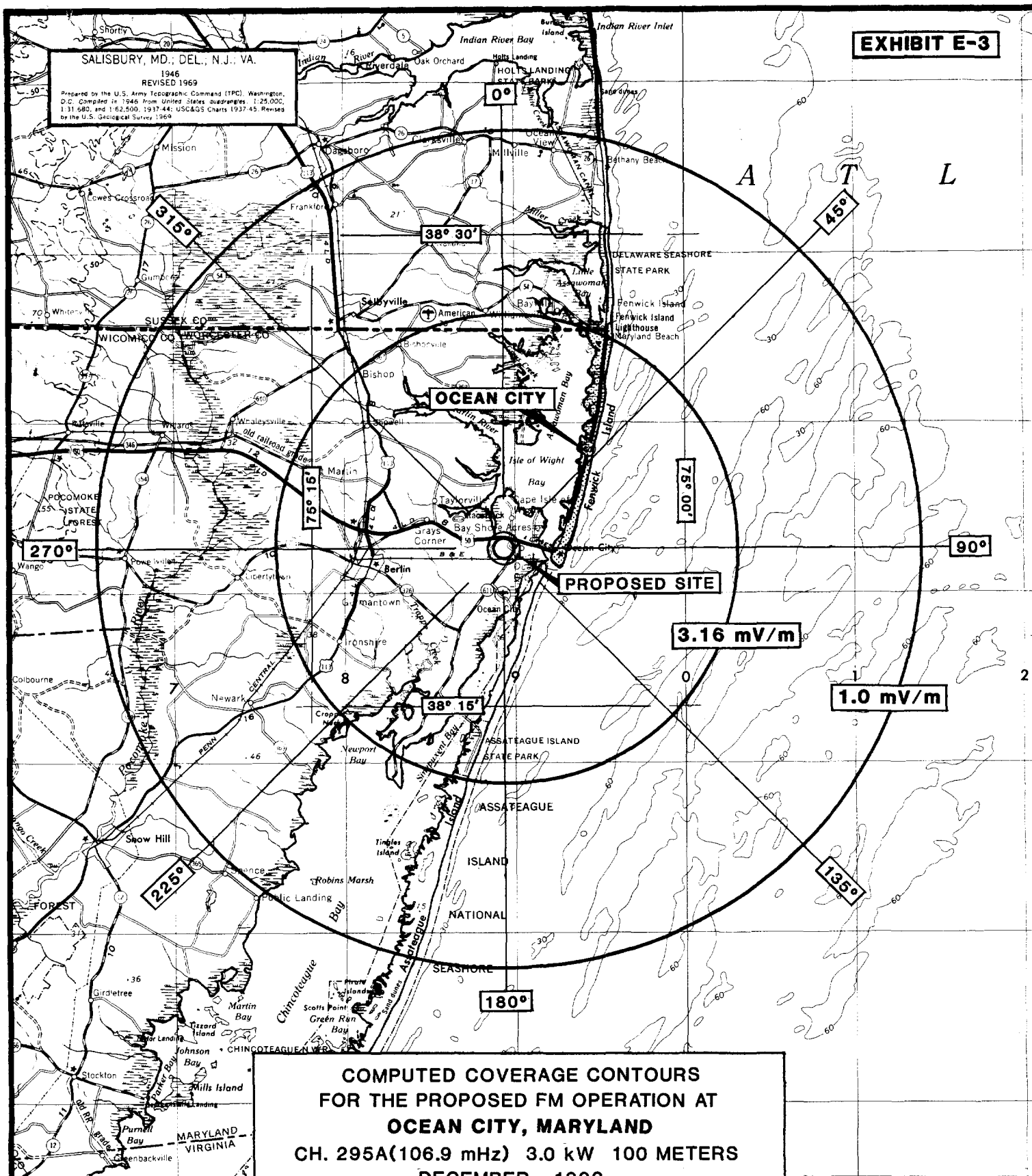
Washington, D.C.



SALISBURY, MD., DEL., N.J., VA.

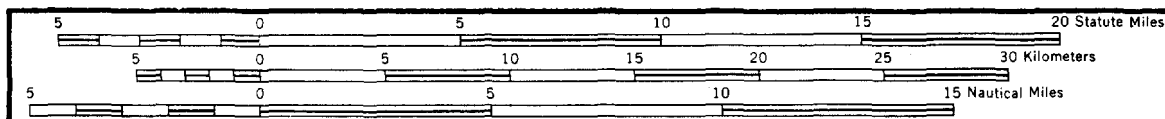
1946
REVISED 1969

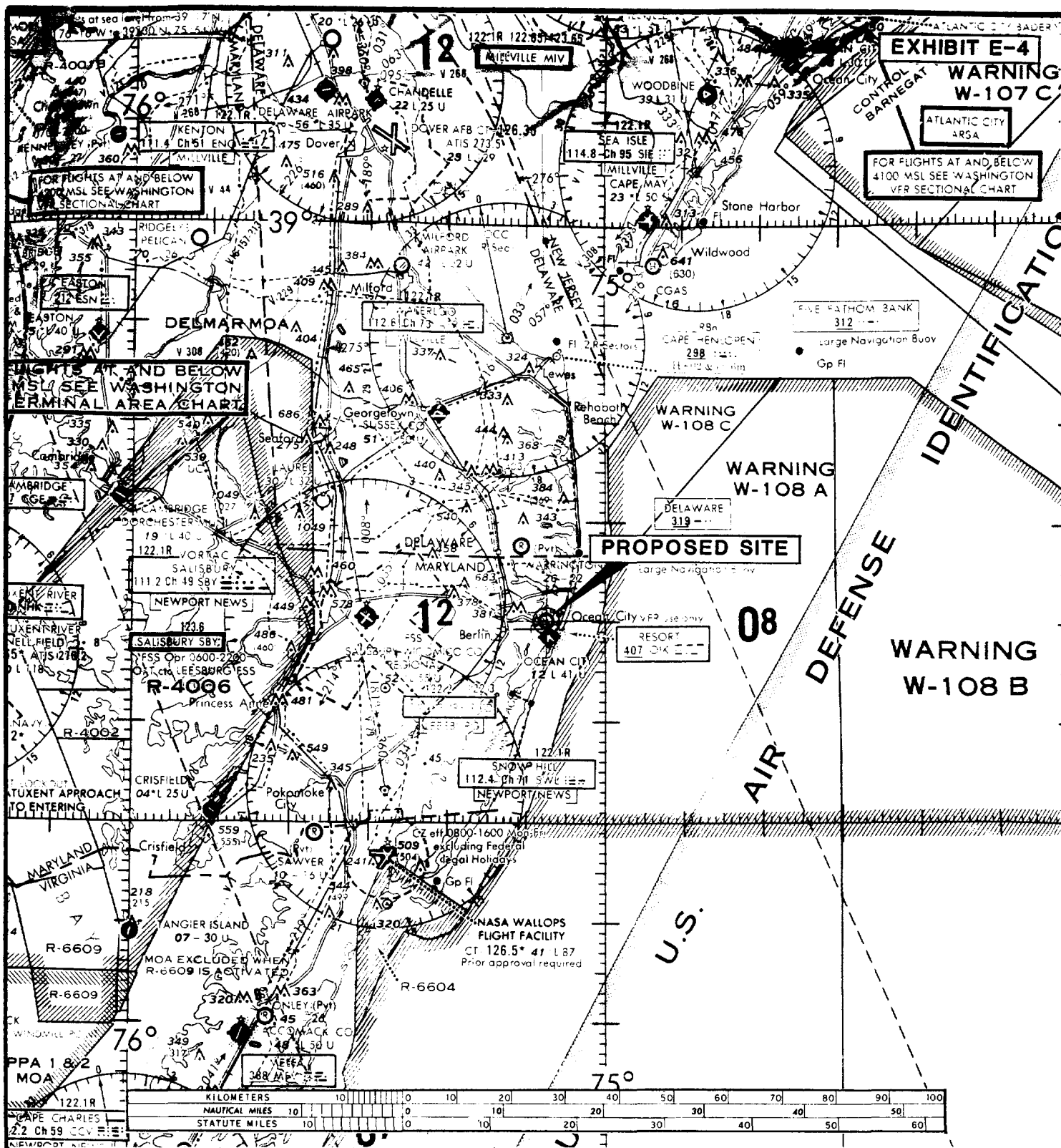
Prepared by the U.S. Army Topographic Command (TPC), Washington, D.C. Compiled in 1946 from United States quadrangles 1:25,000, 1:31,680, and 1:62,500, 1937-44; USCGS Charts 1937-45. Revised by the U.S. Geological Survey 1969.



**COMPUTED COVERAGE CONTOURS
FOR THE PROPOSED FM OPERATION AT
OCEAN CITY, MARYLAND
CH. 295A(106.9 mHz) 3.0 kW 100 METERS
DECEMBER 1990**

COHEN, DIPPELL and EVERIST, P.C. Consulting Engineers Washington, D.C.





**AIRPORTS AND AIRWAYS
IN THE VICINITY OF
THE PROPOSED FM OPERATION AT
OCEAN CITY, MARYLAND
DECEMBER 1990**

COHEN, DIPPELL and EVERIST, P.C.

Consulting Engineers

Washington, D.C.

Section V-B - FM BROADCAST ENGINEERING DATA

FOR COMMISSION USE ONLY

File No. _____

ASB Referral Date _____

Referred by _____

Name of Applicant

Aris Mardirrosian

Call letters (if issued)

New

Is this application being filed in response to a window? ☒ Yes ☐ No

If Yes, specify closing date: December 26, 1990

Purpose of Application: (check appropriate boxes)

☒ Construct a new (main) facility

☐ Construct a new auxiliary facility

☐ Modify existing construction permit for main facility

☐ Modify existing construction permit for auxiliary facility

☐ Modify licensed main facility

☐ Modify licensed auxiliary facility

If purpose is to modify, indicate below the nature of change(s) and specify the file number(s) of the authorizations affected.

☐ Antenna supporting-structure height

☐ Effective radiated power

☐ Antenna height above average terrain

☐ Frequency

☐ Antenna location

☐ Class

☐ Main Studio location

☐ Other (Summarize briefly)

File Number(s) _____

1. Allocation:

Channel No.	Principal community to be served:		
	City	County	State
295A	Ocean City	Worcester	MD

Class (check only one box below)

☒ A ☐ B1 ☐ B ☐ C3

☐ C2 ☐ C1 ☐ C

2. Exact location of antenna.

(a) Specify address, city, county and state. If no address, specify distance and bearing relative to the nearest town or landmark. 0.56 (0.35 mile) south-southwest from intersection U.S. Route 50 and

Keyser Point Road, Worcester County, Maryland

(b) Geographical coordinates (to nearest second). If mounted on element of an AM array, specify coordinates of center of array. Otherwise, specify tower location. Specify South Latitude or East Longitude where applicable; otherwise, North Latitude or West Longitude will be presumed.

Latitude	38°	20'	04"	Longitude	75°	07'	16"
----------	-----	-----	-----	-----------	-----	-----	-----

3. Is the supporting structure the same as that of another station(s) or proposed in another pending application(s)? ☐ Yes ☒ No

If Yes, give call letter(s) or file number(s) or both. _____

If proposal involves a change in height of an existing structure, specify existing height above ground level including antenna, all other appurtenances, and lighting, if any. _____

SECTION V-B - FM BROADCAST ENGINEERING DATA (Page 2)

4. Does the application propose to correct previous site coordinates?

☐ Yes ☒ No

If Yes, list old coordinates.

Latitude	0	'	"	Longitude	0	'	"
----------	---	---	---	-----------	---	---	---

5. Has the FAA been notified of the proposed construction?

☒ Yes ☐ No

If Yes, give date and office where notice was filed and attach as an Exhibit a copy of FAA determination, if available.

Exhibit No.

Date December 20, 1990 Office where filed Eastern Regional Office

6. List all landing areas within 8 km of antenna site. Specify distance and bearing from structure to nearest point of the nearest runway.

Landing Area	Distance (km)	Bearing (degrees True)
(a) <u>Ocean City Municipal</u>	<u>2.0</u>	<u>N 170°E</u>
(b) _____	_____	_____

7. (a) Elevation: (to the nearest meter)

(Non-Rounded)

(1) of site above mean sea level; (3.0) 3 meters(2) of the top of supporting structure above ground (including antenna, all other appurtenances, and lighting, if any); and (104.5) 105 meters(3) of the top of supporting structure above mean sea level [(a)(1) + (a)(2)] (107.6) 108 meters

(b) Height of radiation center: (to the nearest meter) H - Horizontal; V - Vertical

(1) above ground (99.8) 100 meters (H)(99.8) 100 meters (V)(2) above mean sea level [(a)(1) + (b)(1)] (102.8) 103 meters (H)(102.8) 103 meters (V)(3) above average terrain 100 meters (H)

NOTE: 0.1 meter differences result in metric conversion from English units

100 meters (V)

8. Attach as an Exhibit sketch(es) of the supporting structure, labelling all elevations required in Question 7 above, except item 7(b)(3). If mounted on an AM directional-array element, specify heights and orientations of all array towers, as well as location of FM radiator.

Exhibit No.
E-1

9. Effective Radiated Power:

(a) ERP in the horizontal plane 3.0 kw (H*) 3.0 kw (V*)

(b) Is beam tilt proposed?

☐ Yes ☒ No

If Yes, specify maximum ERP in the plane of the tilted beam, and attach as an Exhibit a vertical elevational plot of radiated field.

Exhibit No.

 kw (H*) kw (V*)

*Polarization

SECTION V-B - FM BROADCAST ENGINEERING DATA (Page 3)

10. Is a directional antenna proposed?

☐ Yes ☒ No

If Yes, attach as an Exhibit a statement with all data specified in 47 C.F.R. Section 73.316, including plot(s) and tabulations of the relative field.

Exhibit No.
--

11. Will the proposed facility satisfy the requirements of 47 C.F.R. Sections 73.315(a) and (b)?
Substantial Compliance - Refer Exhibit E

☒ Yes ☐ No

If No, attach as an Exhibit a request for waiver and justification therefor, including amounts and percentages of population and area that will not receive 3.16 mV/m service.

Exhibit No.
--

12. Will the main studio be within the protected 3.16 mV/m field strength contour of this proposal?

☒ Yes ☐ No

If No, attach as an Exhibit justification pursuant to 47 C.F.R. Section 73.1125.

Exhibit No.

13. (a) Does the proposed facility satisfy the requirements of 47 C.F.R. Section 73.207?

☐ Yes ☒ No

(b) If the answer to (a) is No, does 47 C.F.R. Section 73.213 apply?

☒ Yes ☐ No

(c) If the answer to (b) is Yes, attach as an Exhibit a justification, including a summary of previous waivers.

Exhibit No.
E

(d) If the answer to (a) is No and the answer to (b) is No, attach as an Exhibit a statement describing the short spacing(s) and how it or they arose.

Exhibit No.
--

(e) If authorization pursuant to 47 C.F.R. Section 73.215 is requested, attach as an Exhibit a complete engineering study to establish the lack of prohibited overlap of contours involving affected stations. The engineering study must include the following:

Exhibit No.
--

- (1) Protected and interfering contours, in all directions (360°), for the proposed operation.
- (2) Protected and interfering contours, over pertinent arcs, of all short-spaced assignments, applications and allotments, including a plot showing each transmitter location, with identifying call letters or file numbers, and indication of whether facility is operating or proposed. For vacant allotments, use the reference coordinates as the transmitter location.
- (3) When necessary to show more detail, an additional allocation study utilizing a map with a larger scale to clearly show prohibited overlap will not occur.
- (4) A scale of kilometers and properly labeled longitude and latitude lines, shown across the entire exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.
- (5) The official title(s) of the map(s) used in the exhibit(s).

14. Are there: (a) within 60 meters of the proposed antenna, any proposed or authorized FM or TV transmitters, or any nonbroadcast (except citizens band or amateur) radio stations; or (b) within the blanketing contour, any established commercial or government receiving stations, cable head-end facilities, or populated areas; or (c) within ten (10) kilometers of the proposed antenna, any proposed or authorized FM or TV transmitters which may produce receiver-induced intermodulation interference?

☒ Yes ☐ No

If Yes, attach as an Exhibit a description of any expected, undesired effects of operations and remedial steps to be pursued if necessary, and a statement accepting full responsibility for the elimination of any objectionable interference (including that caused by receiver-induced or other types of modulation) to facilities in existence or authorized or to radio receivers in use prior to grant of this application. (See 47 C.F.R. Sections 73.315(b), 73.316(e) and 73.318.)

Exhibit No.
E

15. Attach as an Exhibit a 7.5 minute series U.S. Geological Survey topographic quadrangle map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the requirements set forth in Instruction V. The map must further clearly and legibly display the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers.

Exhibit No.
E-2

16. Attach as an Exhibit *(name the source)* a map which shows clearly, legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers:

Exhibit No.
E-3

(a) the proposed transmitter location, and the radials along which profile graphs have been prepared;

(b) the 0.16 mV/m and 1 mV/m predicted contours; and

(c) the legal boundaries of the principal community to be served.

17. Specify area in square kilometers (1 sq. mi. = 259 sq. km.) and population (latest census) within the predicted 1 mV/m contour.

Area 867 sq. km. Population 28,901

18. For an application involving an auxiliary facility only, attach as an Exhibit a map *(Sectional Aeronautical Chart or equivalent)* that shows clearly, legibly, and accurately, and with latitude and longitude markings and a scale of distance in kilometers:

Exhibit No.
--

(a) the proposed auxiliary 1 mV/m contour; and

(b) the 1 mV/m contour of the licensed main facility for which the applied-for facility will be auxiliary. Also specify the file number of the license.

19. Terrain and coverage data *(to be calculated in accordance with 47 C.F.R. Section 73.313)*

Source of terrain data: *(check only one box below)*

☐ Linearly interpolated 30-second database ☐ 7.5 minute topographic map

(Source: _____)

☒ Other *(briefly summarize)*
NGDC 3-second data base
see Exhibit E - "Topographic Data"

SECTION V-B - FM BROADCAST ENGINEERING DATA (Page 5)

Radial bearing (degrees True)	Height of radiation center above average elevation of radial from 8 to 16 km (meters)	Predicted Distances	
		To the 816 mV/m contour (kilometers)	To the 1 mV/m contour (kilometers)
*			
0	101.6	13.8	24.6
45	102.4	13.8	24.7
90	101.0	13.7	24.5
135	102.8	13.9	24.7
180	102.3	13.8	24.7
225	100.4	13.7	24.5
270	95.4	13.4	23.9
315	96.6	13.5	24.0

*Radial through principal community, if not one of the major radials. This radial should NOT be included in the calculation of HAAT.

20. Environmental Statement (See 47 C.F.R. Section 1.1301 et seq.)

Would a Commission grant of this application come within Section 1.1307 of the FCC Rules, such that it may have a significant environmental impact? ☐ Yes ☒ No

If you answer Yes, submit as an Exhibit an Environmental Assessment required by Section 1.1311.

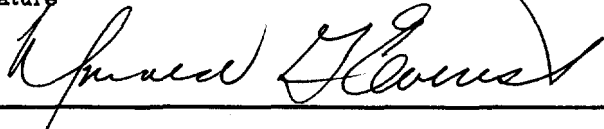
Exhibit No.

--

If No, explain briefly why not. Refer to Exhibit E

CERTIFICATION

I certify that I have prepared this Section of this application on behalf of the applicant, and that after such preparation, I have examined the foregoing and found it to be accurate and true to the best of my knowledge and belief.

Name (Typed or Printed)	Relationship to Applicant (e.g., Consulting Engineer)
Donald G. Everist	Consulting Engineer
Signature	Address (Include ZIP Code)
	Cohen, Dippell and Everist, P.C. 1300 L Street, N.W., Suite 1100 Washington, D.C. 20005
Date	Telephone No. (Include Area Code)
December 20, 1990	(202) 898-0111